REMARKS

Request for Continued Examination

Applicant respectfully requests continued examination of the above-indicated application as per 37 CFR 1.114.

Response to Claim Rejections

Claims 1 and 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwasa et al. (US Patent 5,327,411)

Regarding claim 1, applicant has amended claim 1 to include the limitation "the memory storing a predetermined (emphasis added) plurality of different sets of write strategy parameters". This amendment is supported through the current specification in [0018] and Fig. 1 (memory 114 having different predetermined write strategies as illustrated). Amendments to claim 1 do not introduce any new or additional subject matter.

In light of the above amendment, applicant asserts that Iwasa does not teach a memory storing "a predetermined plurality of different sets of write strategy parameters". The Examiner has identified in the 09/21/06 office action the counter 57 as equivalent to the memory stating "the counter of element 57 is used as a memory". Iwasa additionally teaches "first delay signal D1 has been inputted to the enable terminal of the counter 57...then the counter 57 starts counting clocks" (Col 17 lines 53-56), and "The counter 57 is reset at the rise of the signal D1 and starts counting the next space length" (Col 18 lines 1-2). Because Iwasa teaches the counter 57 to count clocks from a reset state, this inherently means that the counter is initialized to a zero value, and therefore cannot contain "a predetermined plurality of different sets of write strategy parameters" prior to counting. Furthermore, because the counter 57 is dynamic and its value continuously changes starting from the reset state, any stored values contained cannot be predetermined. Reconsideration for the allowance of claim 1 is respectfully requested.

Claims 14-18 depend either directly, or via intervening claims, on claim 1. Therefore, should an allowance be made for claim 1, applicant points out that allowances equally be made for claims 14-18 as being dependent on an allowed base claim.

Claims 2 and 11 are rejected under 35 U.S.C 103(a) as being unpatentable over Iwasa in view of Ogawa et al. (US Patent 2003/0142606)

Claims 2 and 11 depend directly upon or through intervening claims, upon claim 1. Therefore, should an allowance be made for claim 1, applicant points out that allowances equally be made for claims 2 and 11 as being dependent on an allowed base claim.

Claim 3 is rejected under 35 U.S.C 103(a) as being unpatentable over Iwasa in view of Ogawa, and in further view of Furumiya et al.(US 6,791,926)

Claim 3 has been amended to specifically state the limitation ", each of the second parameter representing a delay from a trailing edge of the first pulse of the write time waveform to a leading edge of a second pulse of the write time waveform". This is fully supported in [0028] and Fig. 3 of the original specification as illustrated as β_1. β_1 is clearly shown in Fig. 3 as the distance between the first and second pulses of the same write time waveform signal (emphasis added). No new matter is introduced through the above amendments.

In light of the above amendment, applicant asserts that Furumiya does not teach "second parameter representing a delay from a trailing edge of the first pulse of the write time waveform to a leading edge of a second pulse of the write time waveform" as disclosed in the limitation above for claim 3. The Examiner has stated in the 04/17/06 office action that "the amount given on the right in the middle of each block in figure 3" where indicated between the arrows, as equivalent to the second parameter. The applicant disagrees, as the amount indicated between the arrows in Fig. 3 of

Furumiya indicate the distance between a trailing pulse of a recording pulse waveform (signal below) and a trailing pulse of a recording pattern waveform (signal above). Therefore, the Examiner has referenced a relative spacing between two different waveform patterns. In contrast, the stated limitation of claim 3 refers to a distance between trailing and leading pulses of the same write time waveform. Reconsideration for the allowance of claim 3 is respectfully requested.

Claims 4-5 are rejected under 35 U.S.C 103(a) as being unpatentable over Iwasa in view of Ogawa, and Furumiaya, and in further view of Shoji et al. (US 6,233,211)

Applicant has amended claim 4 by removing the limitation of the trailing edge of the first pulse of the write time waveform being "in alignment with a position of a leading edge of the current pit section " of the previously written "or" clause.

In light of the above amendment, applicant points out that the Examiner has not properly rejected the remaining limitation for claim 4 from the 09/21/06 office action. Particularly, Shoji does not teach "a trailing edge of the first pulse of the write time waveform in alignment with a position twice the base period posterior to a leading edge of the current pit section". Because Shoji does not teach this limitation, applicant asserts that claim 4 should be found allowable with respect to the teachings of Iwasa, Ogawa, Furumiya, and Shoji above. Reconsideration for the allowance of claim 4 is respectfully requested.

Regarding claim 5, the Examiner has stated in the 12/07/06 advisory action that the additional space to the right of the first pulse in Fig. 20 of Shoji can be added to TF to yield the first parameter, such that the first pulse is equal to twice the base period minus the first parameter. The Applicant strongly disagrees because Shoji does not teach TF to be a variable value that can be manipulated according to the unwarranted assumption by the Examiner above.

Shoji teaches that first pulse movement TF "is referenced to the rising edge R1 of the first pattern signal 201, for example, first pulse movement TF1 is expressed as the

time difference from reference time R1 as shown in FIG 20" (Col 13 lines 22-25), which is consistent with the definition of the first parameter according to claim 3 of the present invention. Also, Shoji states "In this exemplary embodiment, pulse movement TF is approximately 3 ns" (Col 13 lines 26) and "T is approximately 30ns" (Col 18 line 36). Therefore, the values for TF and T are fixed through the above definitions taught by Shoji. A quick calculation of the above values will reveal that the first pulse (1.5T) of Shoji (1.5x30ns = 45 ns) does not equal twice the base period less the first parameter (2x30ns – 3ns = 57 ns).

Because Shoji teaches a fixed criteria for determining TF consistent with the definition of the first parameter of the present invention, applicant points out that the Examiner's assertion "the additional space may be added to TF to yield the first parameter" cannot be advanced because it conflicts with the definition of TF taught by Shoji. Additionally, Shoji does not explicitly nor numerically teach the limitation of claim 5. The assumption forwarded by the Examiner is clearly outside the scope of Shoji's teachings. Applicant respectfully requests reconsideration for the allowance of claim 5.

Claims 6-10, 12-13, and 19 depend directly, or through intervening claims, upon claim 1. Therefore, should an allowance be made for claim 1, applicant points out that allowances equally be made for dependent claims 6-10, 12-13, and 19.

New Claims

Claim 20 has been added by the applicant, and includes the same limitation as described in claim 4 of the original disclosure. No new subject matter has been introduced through claim 4. As claim 20 is dependent upon claim 3, should an allowance be made for claim 3, applicant points out that claim 20 should be equally allowed.

Claim 21 is a new independent claim including same limitations of original claim 1, with the added limitation step "storing a predetermined plurality of different sets of

write strategy parameters in the memory prior to receiving an RLL modulation waveform". This is fully supported in the original specification in Fig.3 and [0010] where the "memory stores a plurality of sets of write strategy parameters" before receiving the RLL modulation waveform. Applicant asserts that Iwasa does not teach the limitation "storing a predetermined plurality of different sets of write strategy parameters in the memory prior to receiving an RLL modulation waveform" through the counter 57. Iwasa conversely teaches "the counter 57 functions as a memory which accumulates data of the space length at the time the mark part is inputted" (Col 17 lines 60-62). Therefore, the values in the counter 57 are dynamically determined when simultaneously receiving the mark part (modulation waveform as interpreted by the Examiner). This contrasts claim 21 of the present invention, where the write strategy parameters are already determined within the memory prior to receiving the modulation waveform. Consideration for the allowance of claim 21 is respectfully requested.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Sincerely yours,

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Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan.)